

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|--|------------------|---------|------------------|
| L1 | 153 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (noise with (greater exceed\$3) with threshold) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/02/01 11:03 |
| S1 | 2 | automatic near2 input near2 calibration near2 syste\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 10:59 |
| S2 | 1 | automatic same (input near2 calibration near2 syste\$2) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 10:59 |
| S3 | 347 | automatic adj3 calibration adj2 syste\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:02 |
| S4 | 31 | (automatic adj3 calibration adj2 syste\$2) same opti\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:03 |
| S6 | 6 | (automatic adj3 calibration adj2 syste\$2) and (transdu\$3 near3 opti\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:04 |
| S7 | 164 | (calibration adj2 syste\$2) and (transdu\$3 near3 opti\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:04 |
| S8 | 10 | (calibration adj2 syste\$2) same (transdu\$3 near3 opti\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:04 |
| S10 | 444 | ("702"/\$).ccls. and transdu\$3 same opti\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:08 |
| S11 | 17 | (noise adj2 estimat\$4) same algorithm same window | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:32 |
| S12 | 0 | (noise adj2 estimat\$4) same algorithm same door | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:32 |
| S13 | 9 | (noise adj2 estimat\$4) same algorithm and door | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:32 |
| S14 | 4 | ((("20020172374") or ("20020085725") or ("20030035549") or ("20020172376"))).PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/26 18:20 |

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| S15 | 35 | ((("4558460") or ("5666426") or ("5550922") or ("5530761") or ("5509081") or ("5450494") or ("5615270") or ("5434922") or ("5172358") or ("5107539") or ("4953221") or ("4891837") or ("4882762") or ("4868881") or ("4628526") or ("4553257") or ("4322579") or ("5631968") or ("5463695") or ("5444788") or ("4972164") or ("4947133") or ("4859964") or ("4853963") or ("4641361") or ("4562591") or ("4482973") or ("4368435") or ("4306202") or ("4249042") or ("4216427") or ("4169219") or ("3789143"))).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/11/22 19:32 |
| S16 | 78 | (381/71.14).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2007/01/18 13:06 |
| S17 | 389 | (381/71.9-71.14).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2004/07/26 17:17 |
| S18 | 67 | (381/71.9-71.14).ccls. and ambient | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/10 16:21 |
| S19 | 21 | ("3992585" "4481662" "4483015" "4504704" "4594695" "4596033" "4672674" "4677676" "4741038" "4783817" "4783818" "4845757" "4953217" "4956867" "4985925" "5018202" "5033082" "5046103" "5091954" "5117461" "5138664").PN. | USPAT | OR | OFF | 2005/09/09 14:38 |
| S20 | 8 | (381/71.1-71.14).ccls. and (environment\$2 adj3 input) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 13:12 |
| S21 | 1 | (381/71.1-71.14).ccls. and (time adj3 response adj4 algorit\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 10:01 |
| S22 | 31 | (381/71.1-71.14).ccls. and (time adj4 algorit\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 10:09 |
| S23 | 2 | (381/71.1-71.14,56,94.1).ccls. and (time adj4 algorit\$3) same delay | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:30 |

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| S24 | 25 | (381/71.1-71.14,56,94.1).cccls. and (time adj4 algorit\$3) and delay | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/07/26 17:38 |
| S25 | 5 | (381/71.1-71.14,56,94.1).cccls. and (time adj4 algorit\$3) and delay and threshol\$4 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 10:54 |
| S26 | 5 | (381/71.9-71.14).cccls. and (environment\$2 adj3 input) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 15:19 |
| S27 | 5 | ("4852175" "5581621" "6098038" "6128353" "6430528").PN. | USPAT | OR | OFF | 2004/08/24 09:38 |
| S28 | 33 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/22 10:30 |
| S29 | 16 | (noise adj2 extrac\$3) same algorit\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 09:50 |
| S30 | 20 | (noise adj2 extrac\$4) same algorit\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/26 18:26 |
| S31 | 10 | "5509081".URPN. | USPAT | OR | OFF | 2004/08/24 09:57 |
| S32 | 7 | (381/71.1-71.14).cccls. and (time adj3 response) same algorit\$4 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 10:01 |
| S33 | 40 | "4536887".URPN. | USPAT | OR | OFF | 2004/08/24 10:03 |
| S34 | 2 | syfx.AS. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 10:09 |
| S35 | 8 | ("4887299" "5027410" "5515432" "5526419" "5615270" "6088461" "6104822" "6360203").PN. | USPAT | OR | OFF | 2004/08/24 10:09 |
| S37 | 358 | (381/71.11-71.14).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2004/08/24 11:39 |
| S38 | 5 | ("4852175" "5581621" "6098038" "6128353" "6430528").PN. | USPAT | OR | OFF | 2004/08/24 11:33 |
| S39 | 217 | (381/71.11-71.14).cccls. and delay | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 11:41 |
| S40 | 49 | (381/71.11-71.14).cccls. and algorit\$2 same delay | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:07 |
| S41 | 6 | (381/71.11-71.14).cccls. and algorit\$2 same delay same gain | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/24 11:48 |

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| S42 | 8 | ("4887299" "5027410" "5515432" "5526419" "5615270" "6088461" "6104822" "6360203").PN. | USPAT | OR | OFF | 2004/08/24 11:49 |
| S43 | 3 | "5615270".URPN. | USPAT | OR | OFF | 2004/08/24 11:50 |
| S44 | 3 | "5615270".URPN. | USPAT | OR | OFF | 2004/08/24 11:50 |
| S45 | 82 | ("3714622" "3934084" "3934085" "4025723" "4223181" "4247955" "4254303" "4297527" "4306115" "4380824" "4406923" "4409435" "4438526" "4461025" "4476571" "4479237" "4553258" "4590593" "4598417" "4628526" "4636586" "4641344" "4649505" "4672674" "4677389" "4696030" "4696044" "4718099" "4723294" "4731850" "4751739" "4769847" "4823391" "4827458" "4837834" "4852175" "4864246" "4887299" "4891605" "4953221" "4956867" "4965834" "5018202" "5018205" "5048091" "5068834" "5077799" "5081682" "5089997" "5107539" "5117401" "5126681" "5131047" "5146505" "5146507" "5204971" "5208866" "5226016" "5243661" "5255324" "5267322" "5291558" "5293425" "5311446" "5325437" "5416846" "5434922" "5434926" "5450494" "5485523" "5530761" "5539832" "5615270" "5635903" "5666426" "5774565" "5796847" "5844992" "5872852" "6061455" "6072881" "6078670" "2001/0055400").PN. | USPAT | OR | OFF | 2004/08/25 15:01 |
| S46 | 178 | (381/71.11).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2004/08/24 12:50 |
| S47 | 10 | (381/71.11-71.14).ccls. and noise adj3 fluctuat\$4 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 14:51 |
| S48 | 1 | ("5450494").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2004/08/25 15:02 |

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| S49 | 5 | ("4852175" "5581621" "6098038" "6128353" "6430528").PN. | USPAT | OR | OFF | 2004/08/25 15:06 |
| S50 | 8 | ("4887299" "5027410" "5515432" "5526419" "5615270" "6088461" "6104822" "6360203").PN. | USPAT | OR | OFF | 2004/08/25 15:08 |
| S51 | 230 | (noise adj2 extrac\$4) and algorit\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 15:40 |
| S52 | 36 | (noise adj2 extrac\$4) same reference and algorit\$2 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 15:42 |
| S53 | 37 | (noise adj2 extrac\$4) same (reference adj2 signal) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:02 |
| S54 | 1 | ("5509081").PN. | USPAT; USOCR | OR | OFF | 2004/08/25 15:57 |
| S55 | 10 | "5509081".URPN. | USPAT | OR | OFF | 2004/08/25 15:57 |
| S56 | 7 | "5907622".URPN. | USPAT | OR | OFF | 2004/08/25 16:00 |
| S57 | 30 | (noise adj2 extrac\$4) same (fluctua\$6) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:02 |
| S58 | 17 | (381/71.11-71.14).ccls. and time adj2 response | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:10 |
| S59 | 226 | (381/71.11-71.14).ccls. and amplitude | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:17 |
| S60 | 10 | (381/71.11-71.14,71.1-71.4).ccls. and loop adj3 process\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:24 |
| S61 | 163 | (381/71.11-71.14,71.1-71.4).ccls. and reference same algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/25 16:24 |
| S62 | 17 | ("4122432" "4429578" "4750147" "4965732" "5119432" "5201292" "5245589" "5255565" "5270950" "5410604" "5419198" "5430690" "5434783" "5511008" "5528557" "5535131" "5727073").PN. | USPAT | OR | OFF | 2004/08/25 16:28 |
| S63 | 2 | ((("4589137") or ("5251263"))).PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/26 18:21 |
| S64 | 232 | (noise adj2 extrac\$4) and algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/26 18:31 |

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| S65 | 319 | (noise adj2 estimat\$4) same algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/30 11:31 |
| S66 | 334 | (381/71.11-71.14,71.1-71.4).ccls. and algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2004/08/26 18:41 |
| S69 | 1 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (modify\$3 with (ambient or environment\$2)) with algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/03 14:31 |
| S70 | 6 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (modify\$3 with (ambient or environment\$2 or noise)) with algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/01 16:32 |
| S71 | 2 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (modify\$3 with (ambient or environment\$2 or noise)) with ((error adj2 correction) or (time adj2 response) or (amplitude adj2 response)) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/04 18:09 |
| S72 | 6 | ("5615270").URPN. | USPAT | OR | OFF | 2005/06/03 14:26 |
| S73 | 6 | ("5615270").URPN. | USPAT | OR | OFF | 2005/06/03 14:26 |
| S74 | 11 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (negative adj2 feedback) same (difference or subtract\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/03 14:34 |
| S75 | 23 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (negative adj2 feedback) and microphones | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/04 12:47 |
| S76 | 3 | (381/71.9-71.14,94.1-94.7,71.1-71.4).ccls. and (adaptive with compander) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/04 12:48 |
| S77 | 14 | ("381"/\$).ccls. and (adaptive with compander) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/06/04 12:48 |
| S78 | 1 | ("5832097").PN. | USPAT | OR | OFF | 2005/09/09 14:08 |
| S79 | 5 | ((("4553257") or ("4628526") or ("4868881") or ("4482973") or ("5666426"))).PN. | USPAT | OR | OFF | 2005/09/09 14:40 |
| S80 | 1 | (381/71.1-71.14,56,94.1).ccls. and (algorit\$3) same (time adj2 response) same error | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 14:50 |
| S81 | 266 | (381/71.9-71.14).ccls. and algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 15:26 |

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| S82 | 16 | (381/71.9-71.14).ccls. and (difference with noise with reference) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 15:27 |
| S83 | 23 | (381/71.9-71.14).ccls. and (negative adj2 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 15:29 |
| S84 | 7 | (381/71.1-71.14,94.1-94.7).ccls. and (negative adj2 feedback) same difference | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:24 |
| S85 | 199 | (381/71.1).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2007/01/22 10:48 |
| S86 | 60 | (381/71.13).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/09/09 16:10 |
| S87 | 316 | (381/94.1).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2007/01/11 10:55 |
| S88 | 470 | (381/56).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/09/09 15:42 |
| S89 | 14 | (381/71.1-71.14,94.1-94.7).ccls. and (negative near2 feedback) same (difference or subtract\$4) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 16:28 |
| S90 | 4 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) same (error adj2 correction) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:10 |
| S91 | 8 | ("381"/\$).ccls. and (algorithm) same (error adj2 correction) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 16:30 |
| S92 | 143 | ("381"/\$).ccls. and (algorithm) near4 (time) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 16:31 |
| S93 | 61 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) near4 time | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:25 |
| S94 | 2 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) near4 time same (speaker same noise) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 16:33 |
| S95 | 2 | (381/71.1-71.14,94.1-94.7).ccls. and ((algorithm) near4 time) same (speaker same noise) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 16:34 |

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| S96 | 17 | (381/71.1-71.14,94.1-94.7).cccls. and (algorithm) same amplitude same (speaker same noise) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:02 |
| S97 | 9 | (381/71.1-71.14,94.1-94.7).cccls. and (algorithm) same (power adj3 estima\$4) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:05 |
| S98 | 8 | ("381"/\$).cccls. and (power adj3 estima\$4 adj3 algorithm) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:05 |
| S99 | 27 | (power adj3 estima\$4 adj3 algorithm) and noise | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:05 |
| S10 0 | 426 | (381/71.1-71.14,94.1-94.7).cccls. and (algorithm) same (error or time or amplitude) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/09/09 17:10 |
| S10 1 | 35 | ((("4558460") or ("5666426") or ("5550922") or ("5530761") or ("5509081") or ("5450494") or ("5615270") or ("5434922") or ("5172358") or ("5107539") or ("4953221") or ("4891837") or ("4882762") or ("4868881") or ("4628526") or ("4553257") or ("4322579") or ("5631968") or ("5463695") or ("5444788") or ("4972164") or ("4947133") or ("4859964") or ("4853963") or ("4641361") or ("4562591") or ("4482973") or ("4368435") or ("4306202") or ("4249042") or ("4216427") or ("4169219") or ("3789143"))).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/11/01 13:35 |
| S10 2 | 1 | S101 and (algorithm with (error or amplitude or time)) | USPAT | OR | OFF | 2005/10/04 18:06 |
| S10 3 | 265 | (381/71.9-71.14,94.1-94.7,71.1-71.4).cccls. and (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2 or noise or microphone) with (error or time or amplitude) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:33 |
| S10 4 | 2 | ((("6418228") or ("6324502"))).PN. | USPAT | OR | OFF | 2005/10/04 19:01 |
| S10 5 | 35 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).cccls. and (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2) with (noise or microphone) with (error or time or amplitude) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:24 |

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| S10 6 | 10 | ("381"/\$).cccls. and (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2) with (noise or microphone) with (error or time or amplitude) same algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:38 |
| S10 7 | 15 | (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2) with (noise or microphone) with (error or time or amplitude) same algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:43 |
| S10 8 | 1 | ("5832097").PN. | USPAT | OR | OFF | 2005/10/17 11:42 |
| S10 9 | 34 | (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2) with (noise or microphone) same (error or time or amplitude) same algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:43 |
| S11 0 | 2 | (modify\$3 or chang\$3 or compensat\$4) with (ambient or environment\$2) with (noise or microphone) same (error or time or amplitude) same algorithm same difference | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:43 |
| S11 1 | 0 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).cccls. and (ambient or environment\$2) with (noise or microphone) same (error or time or amplitude) same algorithm same difference | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 11:59 |
| S11 2 | 1 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).cccls. and (ambient or environment\$2) same (noise or microphone) same (error or time or amplitude) same algorithm same difference | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:14 |
| S11 3 | 31 | (ambient or environment\$2) same (noise or microphone) same (error or time or amplitude) same algorithm same difference | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:15 |

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| S11 4 | 35 | ((("4558460") or ("5666426") or ("5550922") or ("5530761") or ("5509081") or ("5450494") or ("5615270") or ("5434922") or ("5172358") or ("5107539") or ("4953221") or ("4891837") or ("4882762") or ("4868881") or ("4628526") or ("4553257") or ("4322579") or ("5631968") or ("5463695") or ("5444788") or ("4972164") or ("4947133") or ("4859964") or ("4853963") or ("4641361") or ("4562591") or ("4482973") or ("4368435") or ("4306202") or ("4249042") or ("4216427") or ("4169219") or ("3789143"))).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/10/17 13:27 |
| S11 5 | 4 | S114 and (LMS or algorithm) | US-PGPUB; USPAT | OR | OFF | 2005/10/17 13:28 |
| S11 6 | 398 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:35 |
| S11 7 | 0 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) same (negative adj2 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:38 |
| S11 8 | 0 | (381/71.1-71.14,56,94.1).ccls. and (noise or ambient or environmen\$4) same (LMS or algorithm) same (negative adj2 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:37 |
| S11 9 | 0 | ("381"/\$).ccls. and (noise or ambient or environmen\$4) same (LMS or algorithm) same (negative adj2 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:37 |
| S12 0 | 0 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) same (negative near3 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/29 10:31 |
| S12 1 | 0 | ("381"/\$).ccls. and (noise) same (LMS or algorithm) same (negative near3 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:37 |
| S12 2 | 1 | ("381"/\$).ccls. and (LMS or algorithm) same (negative near3 feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:38 |
| S12 3 | 6 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) same (difference) same feedback | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 13:39 |
| S12 4 | 1 | ("5450494").PN. | USPAT | OR | OFF | 2005/10/17 13:39 |

EAST Search History

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| S12 5 | 3 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).ccls. and (power with adaptive) same small same noise | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:29 |
| S12 6 | 118 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).ccls. and (power with adaptive) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:29 |
| S12 7 | 3 | (381/71.9-71.14,94.1-94.7,71.1-71.4,56).ccls. and (feedback) with gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:32 |
| S12 8 | 12 | ("381"/\$).ccls. and (feedback) with gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:34 |
| S13 0 | 19 | ("381"/\$).ccls. and (feedback) same gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:50 |
| S13 1 | 29 | noise same (feedback) same gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:50 |
| S13 2 | 101 | ("381"/\$).ccls. and (feedback) and gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:51 |
| S13 3 | 42 | ("381"/\$).ccls. and (noise same feedback) and gain with maximum with minimum | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 14:51 |
| S13 4 | 5 | ("4852175" "5581621" "6098038" "6128353" "6430528").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/10/17 14:52 |
| S13 5 | 388 | (381/71.11-71.14,).ccls. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 16:14 |
| S13 6 | 177 | (381/71.11-71.14,).ccls. and gain | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/17 16:14 |
| S13 7 | 16 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) with time with response | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:27 |
| S13 8 | 11 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) with time with response and delay | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:33 |
| S13 9 | 1 | (381/71.1-71.14,94.1-94.7).ccls. and (algorithm) same time same response same delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 10:09 |
| S14 0 | 1 | ("381"/\$).ccls. and (algorithm) same time same response same delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:35 |

EAST Search History

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| S14 1 | 1 | ("381"/\$).cccls. and (algorithm or LMS) same time same response same delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:35 |
| S14 2 | 37 | (algorithm or LMS) same time same response same delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:36 |
| S14 3 | 43 | (algorithm or LMS) same time same response same delay\$3 same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:36 |
| S14 4 | 35 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/03/23 16:19 |
| S14 5 | 1 | S144 and delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:44 |
| S14 6 | 12 | S144 and delay and threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:49 |
| S14 7 | 12 | S144 and delay\$3 and threshold\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:49 |
| S14 8 | 12 | S144 and time same delay\$3 and threshold\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:54 |
| S14 9 | 1 | S144 and time with response with algorithm same delay\$3 same threshold\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:25 |
| S15 0 | 1 | S144 and time with response with algorithm same delay\$3 and threshold\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:56 |
| S15 1 | 1 | S144 and time with response with algorithm and delay\$3 and threshold\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 09:59 |
| S15 2 | 1 | S144 and time with response with algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 10:00 |
| S15 3 | 3 | S144 and amplitude with algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 10:00 |
| S15 4 | 1 | (381/71.1-71.14,94.1-94.7).cccls. and (algorithm or formula or rule) same time same response same delay same threshold | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/10/18 10:10 |
| S15 5 | 35 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 12:52 |

EAST Search History

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| S15 6 | 1 | S155 and fourier and difference and recti\$7 and envelope and ((root-mean-square) or RMS) and environmental and reference and input and prior | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 13:46 |
| S15 7 | 216 | (381/71.1-71.14).ccls. and ((environment\$2 or noise or ambient) adj3 input) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 13:12 |
| S15 8 | 35 | ((("4558460") or ("5666426") or ("5550922") or ("5530761") or ("5509081") or ("5450494") or ("5615270") or ("5434922") or ("5172358") or ("5107539") or ("4953221") or ("4891837") or ("4882762") or ("4868881") or ("4628526") or ("4553257") or ("4322579") or ("5631968") or ("5463695") or ("5444788") or ("4972164") or ("4947133") or ("4859964") or ("4853963") or ("4641361") or ("4562591") or ("4482973") or ("4368435") or ("4306202") or ("4249042") or ("4216427") or ("4169219") or ("3789143"))).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/11/01 13:36 |
| S15 9 | 1 | ("5692055").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/11/01 13:36 |
| S16 0 | 0 | S155 and fourier and difference and recti\$7 and envelope and ((root-mean-square) or RMS) and environmental and reference and input and prior and delay and threshold and noise and time and nonlinear and exponetial and logarithmic and amplitude and scal\$3 and addi\$5 and multipl\$8 and digital and analog and sub-inputs and negative and feedback | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 13:50 |

EAST Search History

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|----------|----|---|---|----|-----|------------------|
| S16 1 | 1 | S155 and fourier and difference and recti\$7 and envelope and ((root-mean-square) or RMS) and environmental and reference and input and prior and delay and threshold and noise and time and nonlinear and exponential and logarithmic and amplitude and scal\$3 and addi\$5 and multipl\$8 and digital and analog and sub-inputs and negative and feedback | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2005/11/01 13:50 |
| S16 2 | 1 | ("5832097").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2005/11/22 19:32 |
| S16 3 | 36 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/03/23 16:20 |
| S16 4 | 12 | S163 and time and amplitude and error and correction and algorithm and plurality | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/03/23 16:20 |
| S16 5 | 39 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:25 |
| S16 6 | 1 | S165 and (time with response with algorithm) and threshold and delay\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:26 |
| S16 7 | 1 | S165 and ((time with response) same algorithm) and threshold and delay\$3 | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:27 |
| S16 8 | 1 | S165 and ((time with response) same algorithm) and slow | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:27 |
| S16 9 | 13 | S165 and (time with response) and algorithm and slow | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2006/12/28 14:37 |
| S17 0 | 13 | S165 and (time with response) and algorithm | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/10 16:50 |
| S17 1 | 13 | S165 and (time with response) and algorithm | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2006/12/28 14:39 |
| S17 2 | 13 | S165 and (time same response) and algorithm | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2006/12/28 14:39 |

EAST Search History

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|----------|-------|--|--|----|-----|------------------|
| S17 3 | 185 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) same time | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 10:35 |
| S17 4 | 17 | (381/71.1-71.14,56,94.1).ccls. and (noise) same (LMS or algorithm) same (time with response) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 10:45 |
| S17 5 | 3 | ("3855423" "4000369" "4885790").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/29 10:36 |
| S17 6 | 53 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise) same amplitude same feedback same (gain volume) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:20 |
| S17 7 | 10 | ("4455675" "4489441" "4527282" "4769766" "4987598" "5159547" "5182774" "5229699" "5386477" "5600729").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/29 10:54 |
| S17 8 | 8 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise near3 extract\$3) and ((open near2 loop)(closed near2 loop)(leakage near2 loop)) and (reaction near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:23 |
| S17 9 | 10 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise) and ((open near2 loop)(closed near2 loop)(leakage near2 loop)) and (reaction near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:27 |
| S18 0 | 12 | ("381"/\$).ccls. and (noise) and ((open near2 loop)(closed near2 loop)(leakage near2 loop)) and (reaction near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 16:12 |
| S18 1 | 13 | ("381"/\$).ccls. and (noise) and ((open near2 loop)(closed near2 loop)(leakage near2 loop)) and (reaction same time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:26 |
| S18 2 | 47808 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise) and (feedback) same differnece subtract | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 11:08 |

EAST Search History

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|----------|----|---|--|----|-----|------------------|
| S18 3 | 8 | (381/71.1-71.14,94.1-94.7).ccls. and (feedback) same (subtract\$3 difference) same reference same (ambient environment\$2) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:39 |
| S18 4 | 10 | ("4677676" "4677677" "5018202" "5499302" "5745580" "5852667" "5940519" "5945019" "5991418" "6097823").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/29 11:31 |
| S18 5 | 6 | (381/71.1-71.14,94.1-94.7).ccls. and (negative near2 feedback) same (subtract\$3 difference) same reference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:40 |
| S18 6 | 15 | (381/71.1-71.14,94.1-94.7).ccls. and (negative near2 feedback) same (subtract\$3 difference) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 11:40 |
| S18 7 | 33 | (381/71.1-71.14,94.1-94.7, 102-109).ccls. and (negative near2 feedback) same (subtract\$3 difference) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2006/12/29 12:03 |
| S18 8 | 37 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise) same (attack near3 release) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 11:11 |
| S18 9 | 12 | (381/71.1-71.14,56,94.1,102-109).ccls. and (noise) and (variable near3 attack near3 release) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:27 |
| S19 0 | 3 | ((("5784476") or ("6678382") or ("5530761"))).PN. | USPAT | OR | OFF | 2007/01/09 11:18 |
| S19 1 | 9 | (noise) and ((variable near3 attack near3 release) same algorithm) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/18 16:19 |
| S19 2 | 9 | (ambient environment\$2) and ((variable near3 attack near3 release) same algorithm) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:29 |

EAST Search History

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| S19 3 | 14 | (noise) and (variable near3 attack near3 release) and algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:30 |
| S19 4 | 13 | (ambient environment\$2) and (variable near3 attack near3 release) and algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:31 |
| S19 5 | 88 | (ambient environment\$2) same (response near2 time) same algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:32 |
| S19 6 | 2 | "381"/\$.ccls. and (ambient environment\$2) same (response near2 time) same algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:33 |
| S19 7 | 5 | noise same (ambient environment\$2) same (response near2 time) same algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 14:33 |
| S19 8 | 234 | (381/71.1-71.14,94.1-94.7, 102-109).ccls. and (low near2 pass near2 filter) same (variable near3 response near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 15:17 |
| S19 9 | 0 | (381/71.1-71.14,94.1-94.7, 102-109).ccls. and (low near2 pass near2 filter) same (variable near3 response near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 14:35 |
| S20 0 | 17 | (381/71.1-71.14,94.1-94.7, 102-109).ccls. and (low near2 pass near2 filter) same (response near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 15:17 |
| S20 1 | 11 | ("381"/\$.ccls. and (noise) and ((open near2 loop)(closed near2 loop)(leakage near2 loop)) and (reaction near2 time) and algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 16:14 |
| S20 2 | 8 | ("381"/\$.ccls. and (adaptive with (compander compressor expand\$3)) same ((response reaction) near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 16:15 |

EAST Search History

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| S20 3 | 14 | (adaptive with (compander compressor expand\$3)) same ((response reaction) near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 16:17 |
| S20 4 | 5 | ("4852175" "5581621" "6098038" "6128353" "6430528").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/09 16:15 |
| S20 5 | 39 | (adaptive with (compander compressor expand\$3)) same (response reaction) same time | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/09 17:38 |
| S20 6 | 1 | ("6665410").PN. | USPAT | OR | OFF | 2007/01/09 17:38 |
| S20 7 | 10 | ("4455675" "4489441" "4527282" "4769766" "4987598" "5159547" "5182774" "5229699" "5386477" "5600729").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/09 17:38 |
| S20 8 | 0 | ("6665410").URPN. | USPAT | OR | OFF | 2007/01/09 17:40 |
| S20 9 | 0 | ("6665410").URPN. | USPAT | OR | OFF | 2007/01/09 17:40 |
| S21 0 | 0 | ("6665410").URPN. | USPAT | OR | OFF | 2007/01/09 17:40 |
| S21 1 | 5 | dent.in. and loudspeaker and model | USPAT; USOCR; FPRS; EPO | OR | OFF | 2007/01/09 18:03 |
| S21 2 | 14 | ("5680450").URPN. | USPAT | OR | OFF | 2007/01/09 18:02 |
| S21 3 | 910 | "381"/\$.ccls. and loudspeaker and model | US-PGPUB; USPAT | OR | OFF | 2007/01/09 18:04 |
| S21 4 | 19 | "381"/\$.ccls. and loudspeaker same model same inverse | US-PGPUB; USPAT | OR | OFF | 2007/01/09 18:04 |
| S21 5 | 0 | ("6760451").URPN. | USPAT | OR | OFF | 2007/01/09 18:04 |
| S21 6 | 0 | ("6760451").URPN. | USPAT | OR | OFF | 2007/01/09 18:04 |
| S21 7 | 25 | ("5091953").URPN. | USPAT | OR | OFF | 2007/01/10 14:29 |
| S21 8 | 25 | ("5091953").URPN. | USPAT | OR | OFF | 2007/01/10 14:32 |
| S21 9 | 1 | ("4878188").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/10 14:32 |

EAST Search History

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| S22 0 | 6 | ("4122303" "4153815" "4417098" "4649505" "4677676" "4677677").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/10 14:32 |
| S22 1 | 3 | (381/71.1-71.14,94.1-94.7, 102-109).ccls. and (low near2 pass near2 filter) same (delay) same algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 14:36 |
| S22 2 | 9 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and (noise) same (ambient environment\$2) same (delay) same algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 14:47 |
| S22 3 | 14 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and microphone same (algorithm with delay) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 14:48 |
| S22 4 | 4 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and microphone same (algorithm near3 delay) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 16:00 |
| S22 5 | 12 | "381"/\$.ccls. and microphone same (algorithm near3 delay) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 14:51 |
| S22 6 | 47 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and microphone same (reference) same (difference subtract\$3) same (gain volume amplitude) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 16:01 |
| S22 7 | 13 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and microphone same (reference) same (difference subtract\$3) same (gain volume amplitude) same feedback | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 16:17 |
| S22 8 | 16 | (381/71.1-71.14,94.1-94.7,102-109, 73.1).ccls. and microphone same (\$4speaker) same (difference subtract\$3) same (gain volume amplitude) same feedback | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 16:48 |
| S22 9 | 298 | (381/71.9-71.14).ccls. and (difference subtract\$3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 16:22 |

EAST Search History

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| S23 0 | 0 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback with (gain volume) with max\$4 with minimum | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 17:11 |
| S23 1 | 0 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback same (gain volume) same (max\$4 with minimum) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 17:12 |
| S23 2 | 39 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/10 16:50 |
| S23 3 | 13 | S232 and (minimum and maximum and feedback) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/11 12:02 |
| S23 4 | 0 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback with (gain volume) with minimum | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 17:11 |
| S23 5 | 0 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback same (gain volume) same (minimum) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 17:12 |
| S23 6 | 146 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback same (gain volume) same (high same low) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 17:13 |
| S23 7 | 112 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and feedback same (gain volume) same (high with low) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/10 18:27 |
| S23 8 | 75 | (381/71.1-71.14,94.1-94.7,102-109,73.1).ccls. and (user with (gain volume)) same (high with low) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 11:02 |
| S23 9 | 13 | S232 and (minimum and maximum and feedback) and (difference subtract\$3) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/10 18:37 |
| S24 0 | 383 | (381/94.1).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2007/01/11 10:56 |

EAST Search History

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|----------|----|--|--|----|-----|------------------|
| S24 1 | 6 | S240 and microphone and (feedback same (gain volume) same (minimum low) same (maximum high)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 10:56 |
| S24 2 | 97 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and microphone and (feedback same (gain volume) same (minimum low) same (maximum high)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 11:03 |
| S24 3 | 46 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and microphone and (feedback same ((gain volume) with (minimum low) with (maximum high))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 11:11 |
| S24 4 | 72 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and feedback and ((setting determin\$4 choos%3) same ((gain volume) with (minimum low) with (maximum high))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 11:32 |
| S24 5 | 32 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (gain with predetermined with (minimum low) with (maximum high)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 13:36 |
| S24 6 | 87 | (381/71.14).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 12:02 |
| S24 7 | 39 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/11 14:08 |
| S24 8 | 1 | S247 and ((root-mean-squared) (fourier) (rectify\$3)) same prior same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 12:05 |
| S24 9 | 1 | S247 and ((root-mean-square) (fourier) (rectify\$3)) same prior same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 14:04 |
| S25 0 | 1 | S247 and ((root-mean-square) (fourier) (rectify\$3)) same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 12:05 |

EAST Search History

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| S25 1 | 13 | S247 and (root near2 mean near2 square) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 12:06 |
| S25 2 | 13 | S247 and (fourier) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 13:32 |
| S25 3 | 1 | S247 and (envelope) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 12:07 |
| S25 4 | 1 | S247 and (compar\$3 with reference with input with power) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 13:33 |
| S25 5 | 14 | S247 and (compar\$3 same reference same power) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 13:33 |
| S25 6 | 12 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (compar\$3 with (reference \$4speaker) with noise with power) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 10:54 |
| S25 7 | 6 | ("4658426" "4939685" "5402496" "5473702" "5475632" "5608804").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/11 13:38 |
| S25 8 | 69 | ("4658426").URPN. | USPAT | OR | OFF | 2007/01/11 13:39 |
| S25 9 | 43 | bizjak.in. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/11 14:08 |
| S26 0 | 87 | (381/71.14).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/18 13:06 |
| S26 1 | 11 | ("5319715").URPN. | USPAT | OR | OFF | 2007/01/18 13:19 |

EAST Search History

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|----------|----|--|--|----|-----|------------------|
| S26 2 | 1 | ("5170433").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/18 13:20 |
| S26 3 | 1 | "381"/\$.ccls. and adaptive\$2 with (variable near3 attack near3 release) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/18 16:20 |
| S26 4 | 8 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (adaptive\$2 with (reaction near3 time)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 10:55 |
| S26 5 | 10 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (adaptive\$2 same (reaction near3 time)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 10:56 |
| S26 6 | 0 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (varying varia\$3) near3 reaction near3 time | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 10:57 |
| S26 8 | 7 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (filter transient) with reaction near3 time | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 10:57 |
| S26 9 | 13 | ("3826870" "4122303" "4153815" "4177874" "4417098" "4489441" "4490841" "4815139" "5018202" "5091953" "5097923" "5224168" "5233540").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/19 11:00 |
| S27 0 | 17 | ("5416845").URPN. | USPAT | OR | OFF | 2007/01/19 11:01 |
| S27 1 | 40 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and reaction near3 time | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 14:44 |
| S27 3 | 2 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and delay\$3 same noise same (reaction near3 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/19 14:46 |

EAST Search History

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|----------|--------|--|--|----|-----|------------------|
| S27 4 | 17 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and delay\$3 same noise same (time near3 response) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 09:58 |
| S27 5 | 8 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and slow same noise same (time near3 response) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:28 |
| S27 6 | 12 | (381/71.1-71.14,94.1-94.7,102-109, 73.1,56).ccls. and (environmental near3 inputs) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:30 |
| S27 7 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/22 10:30 |
| S27 8 | 21 | S277 and (digital same analog) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/22 13:45 |
| S27 9 | 153 | (381/71.4).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:49 |
| S28 0 | 132242 | S279 and (reaction near2 time) or (time near2 response) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:49 |
| S28 1 | 1 | S279 and (reaction near2 time) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:50 |
| S28 2 | 15 | S279 and (time near2 response) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 10:50 |
| S28 3 | 13 | S277 and (plurality same algorithms) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/31 13:35 |
| S28 4 | 1 | ("4306115").PN. | USPAT | OR | OFF | 2007/01/22 12:47 |

EAST Search History

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|----------|----|--|--|----|-----|------------------|
| S28 5 | 16 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (power near3 estimat\$3) with algorithm | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/23 14:47 |
| S28 6 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/22 13:45 |
| S28 7 | 0 | S286 and (rectify\$4 same envelope same prior same difference) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 13:45 |
| S28 8 | 1 | S286 and (rectify\$4 same envelope same prior same difference) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 13:50 |
| S28 9 | 1 | S286 and (rectify\$4 same envelope same difference) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 13:51 |
| S29 0 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/22 14:04 |
| S29 1 | 1 | S290 and ((root-mean-square) (fourier) (rectify\$3)) same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 14:04 |
| S29 2 | 1 | S290 and (root near2 mean near2 square) same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 14:06 |
| S29 3 | 1 | S290 and (fourier near3 transform) same difference | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 16:12 |
| S29 4 | 0 | S290 and (combin44 with environmental with inputs) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 16:13 |

EAST Search History

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|----------|-----|---|--|----|-----|------------------|
| S29 5 | 13 | S290 and (combin\$4 with environmental with inputs) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/23 14:37 |
| S29 6 | 13 | S290 and ((combin\$4 add\$3 sum\$4) with primary) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/22 16:14 |
| S29 7 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/23 14:38 |
| S29 8 | 13 | S297 and (compar\$3 with reference with power) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/23 15:55 |
| S29 9 | 36 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (compar\$3 with reference with power) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/29 11:32 |
| S30 0 | 63 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (compar\$3 with reference with noise) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/23 14:59 |
| S30 1 | 0 | S297 and (inidcat\$4 with noise) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/23 15:55 |
| S30 2 | 13 | S297 and (indicat\$4 with noise) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/31 11:21 |
| S30 3 | 6 | ("4658426" "4939685" "5402496" "5473702" "5475632" "5608804").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/01/23 16:17 |
| S30 4 | 384 | (381/94.1).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO | OR | OFF | 2007/01/23 16:20 |
| S30 5 | 33 | (381/71.1-71.14,94.1-94.7,102-109,73.1,56).ccls. and (compar\$3 with reference with noise with level) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/02/01 10:11 |

EAST Search History

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| S30 6 | 40 | toru.in. and telephone same noise | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/30 17:03 |
| S30 7 | 1 | terauchi.in. and telephone same noise | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/30 17:04 |
| S30 8 | 13 | terauchi.in. and telephone and noise | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/30 17:04 |
| S30 9 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/31 11:21 |
| S31 0 | 13 | S309 and (digital same environmental) and analog | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/31 11:27 |
| S31 1 | 3 | S309 and (digital same environmental same analog) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/31 11:28 |
| S31 2 | 13 | S309 and (digital and environmental and analog) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO | OR | OFF | 2007/01/31 11:28 |
| S31 3 | 40 | bizjak.in. | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/31 13:35 |
| S31 4 | 13 | S313 and (plurality and algorithms) | US-PGPUB; USPAT; EPO; JPO | OR | OFF | 2007/01/31 13:35 |